

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

2520 Venture Oaks, Suite 350
Sacramento, CA 95833
(916) 274-5721
FAX (916) 274-5743
www.dir.ca.gov/oshsb



Attachment No. 2

INITIAL STATEMENT OF REASONS**CALIFORNIA CODE OF REGULATIONS**

TITLE 8: Chapter 4, Subchapter 4, Article 2, Section 1504, and Article 21,
Sections 1637 and 1640 of the Construction Safety Orders (CSO)

Scaffold Design and Use**SUMMARY**

This proposed rulemaking action is being initiated at the request of the Division of Occupational Safety and Health (Division). The Division submitted a Form 9, Request for New, or Change in Existing, Safety Order, dated July 18, 2000, to amend the Construction Safety Orders (CSO), Sections 1504 and 1637 to clarify the definitions and design criteria for light-duty, medium-duty, heavy-duty and special-duty scaffolds.

According to the Division, a contractor contacted a scaffold company for pricing information on providing and installing metal scaffolding. Confusion arose when the contractor was presented with two prices: one for a scaffold designed for a working load of 10 pounds per square foot (psf) of working platform, and the other for a scaffold designed for a working load of 25 psf of working platform. The contractor contacted the Division for the interpretation of Title 8 regulations pertaining to this matter. After researching the Title 8 safety orders, the Division concluded that the scaffold design criteria specified in various sections of the Construction Safety Orders are neither consistent nor very clear.

For example, tube and coupler, tubular welded frame, bracket, and pump jack scaffolds (Sections 1644(b) and (c), 1645(d), and 1655(a)) must be constructed and erected to support 4 times the maximum intended/rated load that is applied to them. Light, medium, heavy and special-duty scaffolds, as defined in Section 1504(a), must be designed and constructed to carry maximum working loads of 25, 50, 75 and exceeding 75 psf of scaffold platform, respectively. Light, medium, and heavy-duty tube and coupler scaffolds address the same load requirements in tables 1, 2, and 3 of Section 1644(b). Other scaffolds, such as light-trade interior wooden scaffolds, ladder jack and pump jack scaffolds, address different working load requirements that are unique to these scaffolds.

29 Code of Federal Regulations (CFR) Part 1926.451(a)(1) specifies that each scaffold and scaffold component shall be capable of supporting its own weight and at least 4 times the maximum intended load applied or transmitted to it. Similar to this requirement, Section 4.6 of American National Standards Institute (ANSI) A10.8-1988 requires that the scaffold be capable

of supporting its own weight and at least 4 times the maximum intended load with exceptions for guard rail systems, suspension ropes, solid sawn wood components, and other wood-based members and connections to wood. ANSI A10.8-1988 further defines load ratings specifically for scaffold platform units. Section 5.1.2.2 addresses uniformly distributed load criteria for each platform unit on a scaffold. The applicable uniformly distributed load criteria for each light, medium, heavy and special duty platform unit are 25, 50, 75, and exceeding 75 psf of platform unit area, respectively.

In light of the aforementioned federal requirements and industry standards, this rulemaking action will address the Division's request to provide clarity and consistency in the scaffold design/construction criteria contained in Title 8 by outlining strength and loading requirements specific to light, medium, heavy and special-duty scaffolds and maximum design load requirements that are applicable to all scaffolds. The proposed design load requirements differ from the federal counterpart regulations and ANSI standards in that scaffolds must be designed and constructed to support at least 4 times their own weight in addition to at least 4 times the maximum intended working load, whereas federal regulations and ANSI standards require scaffolds to withstand only their own weight and at least 4 times the maximum intended load that is applied or transmitted to them. A number of advisory committee members, representative of the scaffold and construction industry, opined that the federal regulations and ANSI standards are intended to mean that the scaffold must be capable to support at least 4 times its own weight and at least 4 times the maximum intended working load, although clearly the Federal language does not so state this specifically. However, upon the advisory committee's request, Board staff contacted the nation's largest scaffold manufacturers who indicated that their scaffolds are designed and manufactured to support 4 times their own weight and 4 times the maximum intended working load. The proposed design load requirements will be applicable to all scaffolds in order to be consistent with the scaffold industry's design load requirements.

SPECIFIC PURPOSE AND FACTUAL BASIS OF PROPOSED ACTION

This proposed rulemaking action contains non-substantive, editorial and grammatical revisions. These non-substantive revisions are not all discussed in this Informative Digest, but they are clearly indicated in the regulatory text in underline and strikeout format. In addition to these non-substantive revisions, the following actions are proposed:

Section 1504. Definitions.

Section 1504 gives the definitions of the various terms used in the Title 8, Construction Safety Orders. Revisions are proposed to amend the scaffold and staging definitions, specifically paragraphs (D) through (G) pertaining to light, medium, heavy and special-duty scaffolds, respectively. It is proposed to delete the term "metal" from the definitions of these categories of scaffolds so as not to conflict with the requirements contained in existing Section 1637(b), which states in part that "scaffolds shall be constructed of wood or other suitable materials such as steel or aluminum members of known strength characteristics." In addition, it is proposed to delete the phrase "not to exceed" before the listed psf working load requirements to prevent scaffolds from being constructed to support loads less than these amounts, and add language that clarifies what constitutes the working loads for each of these scaffold categories. To eliminate duplication, it is proposed to delete definitions (B) for heavy trade scaffolds and (C) for light

trade scaffolds. It is further proposed to add a new paragraph (B) to provide the definition for a new term, “Scaffold, Engineered”, that is not currently defined in Section 1504 and is included as one of the scaffold categories proposed in Section 1637(b)(2). The remaining definitions are proposed for re-lettering, consistent with existing Title 8 format. To avoid conflict with the different load requirements for light-duty interior scaffolds, a “note” is proposed for the definition of “Light-Duty Scaffold” which states that load requirements for light-duty interior scaffolds are contained in Section 1640(c)(1). The proposed amendments are necessary to clarify to employers that light, medium, heavy and special duty scaffolds may be constructed of materials other than metal and to clarify what constitutes the load requirements for these categories of scaffolds.

Section 1637(b)

Section 1637 addresses the general requirements for the construction of scaffolds such as, but not limited to, suitable scaffold materials, required strength characteristics, alternative materials of construction, etc. A revision is proposed to add the title “Scaffold Design and Construction” to Section 1637(b), since additional subsections are proposed (see below) that are specific to the design and construction of scaffolds. It is also proposed to label existing subsection 1637(b) as 1637(b)(1), and add five new subsections, (b)(2), (b)(3), (b)(4), (b)(5), and (b)(6), which address the following design, construction and use requirements for scaffolds:

Proposed new subsection (b)(2) will stipulate that each scaffold shall be designed and constructed to support at least 4 times its own weight and 4 times the maximum intended working load applied or transmitted to it. The proposed amendment will render the state’s standard consistent with industry practice in terms of design and manufactured strength and clearly indicate to the employer that these design load requirement are applicable to all scaffolds addressed by the Title 8, Construction Safety Orders. The proposed revision is necessary to ensure consistency with federal requirements to the extent that California’s counterpart scaffold regulations address design and strength requirements which in California’s case are in accordance with current industry standards.

New subparagraphs (A), (B), and (C) of Section 1637(b)(2) are proposed to specify the working loads of 25, 50, and 75 psf of work platform for light, medium, and heavy-duty scaffolds, respectively. An “exception” to subparagraph (A) is proposed which states that light-duty interior scaffolds shall adhere to the loading requirements contained in Section 1640(c)(1). Subparagraph (D) is proposed which stipulates that the working load for special-duty scaffolds is in excess of 75 pounds psf, as determined by a qualified person or a Civil Engineer currently registered in the State of California and experienced in scaffold design. Subparagraph (E) is proposed which stipulates that the working load for engineered scaffolds is to be determined by a Civil Engineer currently registered in the State of California and experienced in scaffold design. Subparagraph (E) is added to make the requirements of (b)(2) applicable to any engineered scaffold referenced in existing Title 8 safety orders. The proposed revisions are necessary to clarify to employers the strength and loading characteristics required for the design and construction of each category of scaffolds and will ensure consistency with current industry standards.

Section 1637(b)(3) is proposed which specifies that a scaffold shall not be subjected to loads greater than its maximum intended working load (see 1637(b)(2)). The proposed revision is

necessary to prohibit the employer from overloading scaffold platforms beyond their intended working loads.

Section 1637(b)(4) is proposed which states: “Manufactured scaffolds shall be used in accordance with the manufacturer’s recommendations.” The proposed revision is necessary to ensure that manufactured scaffolds are used in a manner consistent with their design.

Section 1637(b)(5) is proposed which states that a qualified person shall determine the maximum intended working load for scaffolds that are neither manufactured nor engineered. The proposed revision is necessary to ensure that only a qualified person, as defined in the Construction Safety Orders, makes the required determination.

Section 1637(b)(6) is proposed which requires that the maximum intended working load for each scaffold be posted at a conspicuous location at each jobsite or be provided to each supervisory employee who shall have it readily available. The proposed revision is necessary to prevent overloading of scaffolds by making employees aware of the maximum intended working loads of scaffolds used at the jobsite.

Section 1640(C). Light – Trade Interior Scaffolds.

Section 1640 addresses the design and construction requirements for light – trade wooden pole scaffolds. Subsection (b) is applicable to exterior scaffolds, whereas subsection (C) is applicable to interior scaffolds. A revision is proposed to replace the term “Trade” in the section title and the titles of subsections (b) and (C) with the word “Duty” for consistency with the definitions in Section 1504 and current industry terminology. In addition, an editorial revision is proposed to re-letter subsection (C) as “(c)” for consistency with existing Title 8 lettering format. The proposed revisions are necessary to provide clarity to the regulation.

DOCUMENTS RELIED UPON

1. Division of Occupational Safety and Health, Request for New, or Change in Existing, Safety Order (Form 9), dated July 18, 2000.
2. Federal OSHA, 29 CFR Part 1926.451(a)(1).
3. American National Standards Institute, ANSI A10.8-1988, Scaffolding — Safety Requirements, Sections 3, 4.6 and 5.1.2.

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California.

DOCUMENTS INCORPORATED BY REFERENCE

None.

REASONABLE ALTERNATIVES THAT WOULD LESSEN ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES

No reasonable alternatives were identified by the Board and no reasonable alternatives identified by the Board or otherwise brought to its attention would lessen the impact on small businesses.

SPECIFIC TECHNOLOGY OR EQUIPMENT

This proposal will not mandate the use of specific technologies or equipment.

COST ESTIMATES OF PROPOSED ACTION

Costs or Savings to State Agencies

No costs or savings to state agencies will result as a consequence of the proposed action.

Impact on Housing Costs

The Board has made an initial determination that this proposal will not significantly affect housing costs.

Impact on Businesses

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

Cost Impact on Private Persons or Businesses

The Board is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Costs or Savings in Federal Funding to the State

The proposal will not result in costs or savings in federal funding to the state.

Costs or Savings to Local Agencies or School Districts Required to be Reimbursed

No costs to local agencies or school districts are required to be reimbursed. See explanation under "Determination of Mandate."

Other Non-discretionary Costs or Savings Imposed on Local Agencies

This proposal does not impose non-discretionary costs or savings on local agencies.

DETERMINATION OF MANDATE

The Occupational Safety and Health Standards Board has determined that the proposed regulations do not impose a local mandate. Therefore, reimbursement by the state is not required pursuant to Part 7 (commencing with Section 17500) of Division 4 of the Government Code because the proposed amendments will not require local agencies or school districts to incur additional costs in complying with the proposal. Furthermore, these regulations do not constitute a “new program or higher level of service of an existing program within the meaning of Section 6 of Article XIII B of the California Constitution.”

The California Supreme Court has established that a “program” within the meaning of Section 6 of Article XIII B of the California Constitution is one which carries out the governmental function of providing services to the public, or which, to implement a state policy, imposes unique requirements on local governments and does not apply generally to all residents and entities in the state. (County of Los Angeles v. State of California (1987) 43 Cal.3d 46.)

The proposed regulations do not require local agencies to carry out the governmental function of providing services to the public. Rather, the regulations require local agencies to take certain steps to ensure the safety and health of their own employees only. Moreover, the proposed regulations do not in any way require local agencies to administer the California Occupational Safety and Health program. (See City of Anaheim v. State of California (1987) 189 Cal.App.3d 1478.)

These proposed regulations do not impose unique requirements on local governments. All employers - state, local and private - will be required to comply with the prescribed standards.

EFFECT ON SMALL BUSINESSES

The Board has determined that the proposed amendments may affect small businesses.

ASSESSMENT

The adoption of the proposed amendments to these regulations will neither create nor eliminate jobs in the State of California nor result in the elimination of existing businesses or create or expand businesses in the State of California.

ALTERNATIVES THAT WOULD AFFECT PRIVATE PERSONS

No reasonable alternatives have been identified by the Board or have otherwise been identified and brought to its attention that would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.